

522,683

Rec'd PCT 21 JAN 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
12 February 2004 (12.02.2004)

PCT

(10) International Publication Number
WO 2004/013254 A1

(51) International Patent Classification⁷: **C09K 19/04**,
19/30

(21) International Application Number:
PCT/KR2003/001476

(22) International Filing Date: 23 July 2003 (23.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10-2002-0045564 1 August 2002 (01.08.2002) KR

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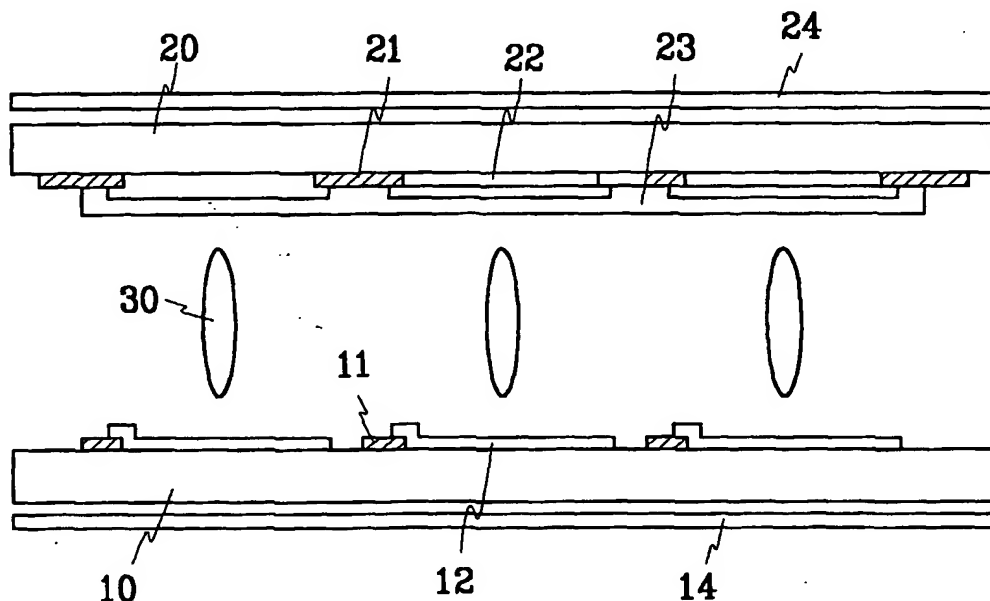
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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: **HIGH-SPEED HIGH-TEMPERATURE NEMATIC LIQUID CRYSTAL COMPOSITION AND LIQUID CRYSTAL DISPLAY COMPRISING THE SAME**



(57) Abstract: The present invention relates to a high-speed high-temperature nematic liquid crystal composition and a liquid crystal display comprising the same, particularly to a high-speed high-temperature nematic liquid crystal composition which comprises a nematic liquid crystal compound having an isothionate group on the end aromatic ring and having one or more kinds of fluorine atoms, and thus satisfies a high response speed property and has a high phase transition temperature of liquid crystal, a low operating voltage, and a broad nematic phase temperature range, and a liquid crystal cell comprising the same, and a liquid crystal display using the same.

WO 2004/013254 A1



(84) **Designated States (regional):** ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

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INTERNATIONAL SEARCH REPORT

International application
PCT/KR 03/01476-0

CLASSIFICATION OF SUBJECT MATTER

IPC⁷: C09K 19/04, 19/30,

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷: C09K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPODOC Databases, REGISTRY and CAPLUS Databases

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 03/035798 A1 (SAMSUNG ELECTRONICS CO., LTD.) 1 May 2003 (01.05.03) <i>the whole document, espl. pages 11-14, claims.</i>	1,2,5,6
P,X	JP 2003 129052 A2 (DAINIPPON INK AND CHEMICALS, INC.), 8 May 2003 (08.05.03), (abstract) CA [online], Chemical Abstracts online [retrieved on 11.9.2003]. Retrieved from: CAPLUS Database, STN-International, Karlsruhe (DE), CAPLUS Accession no. 2003:349562 and Computer-translation of JP 2003129052 A2, retrieved via the Internet. Retrieved from the Japanese Patent Office on 11.9.2003, URL< http://www4.ipdl.jpo-miti.go.jp/cgi-bin/tran_web_cgi_ejje?N0000=60&N0120=01&N2001=2&N3001=H2003-129052 >; <i>CAPLUS and PAJ abstracts and Computer translation of the Patent claims.</i>	1,3,6

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

„A“ document defining the general state of the art which is not
considered to be of particular relevance„E“ earlier application or patent but published on or after the international
filing date„L“ document which may throw doubts on priority claim(s) or which is
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special reason (as specified)„O“ document referring to an oral disclosure, use, exhibition or other
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the priority date claimed„T“ later document published after the international filing date or priority
date and not in conflict with the application but cited to understand
the principle or theory underlying the invention„X“ document of particular relevance; the claimed invention cannot be
considered novel or cannot be considered to involve an inventive step
when the document is taken alone„Y“ document of particular relevance; the claimed invention cannot be
considered to involve an inventive step when the document is
combined with one or more other such documents, such combination
being obvious to a person skilled in the art

„&“ document member of the same patent family

Date of the actual completion of the international search

11 September 2003 (11.09.2003)

Date of mailing of the international search report

20 October 2003 (20.10.2003)

Name and mailing address of the ISA/AT

Austrian Patent Office

Dresdner Straße 87, A-1200 Vienna

Facsimile No. 1/53424/535

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR 03/01476-0

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5578241 A (H. PLACH et al.) 26 November 1996 (26.11.96)	1,2
A	<i>the whole document, esp. claim and columns 6-8.</i> <i>the whole document, esp. claim and columns 6-8.</i> ----	3-15

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Further remarks:

1) The search has been limited to those parts of the claims which - from the chemical point of view - find sufficient support by the disclosure of the application, namely to compositions comprising a compound of formula 1 with:

- A being cyclohexyl exclusively and
- B being CH₂- CH₂-;

2) the meanings of the "R1" residue is not clear, since by the giving of the molecular formula, only, the residues are not characterized sufficiently, because for examples it cannot be verified which bonds are comprised in these residues;

INTERNATIONAL SEARCH REPORT

Information on patent family members

International app. No.

PCT/KR 03/01476-0

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
JP	A	20031290 52A2		none	
US	A	5578241	1996-11-26	none	
WO	A	35798		none	